

SEE-GRID Infrastructure and Grid Operations

www.see-grid.eu

September 28, 2006



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WP3: Infrastructure-related goals



SEE-GRID
South Eastern European GRid-enabled
Infrastructure Development

- Proliferation of Grid Resource Centers
 - Expand regionally to include new countries/areas and widen the SEE e-community
 - Expand nationally to include new sites/institutes and strengthen collaboration in each country – create a web of resource centers also at national level, not only at regional (support to SEE NGIs)
- Application-driven deployment approach
 - serve the needs of diverse and multi-disciplinary communities
 - extend the user-base – USE the grid, USE the network, USE the e-Infrastructure
 - get closer to the public-at-large

Main WP3 activities



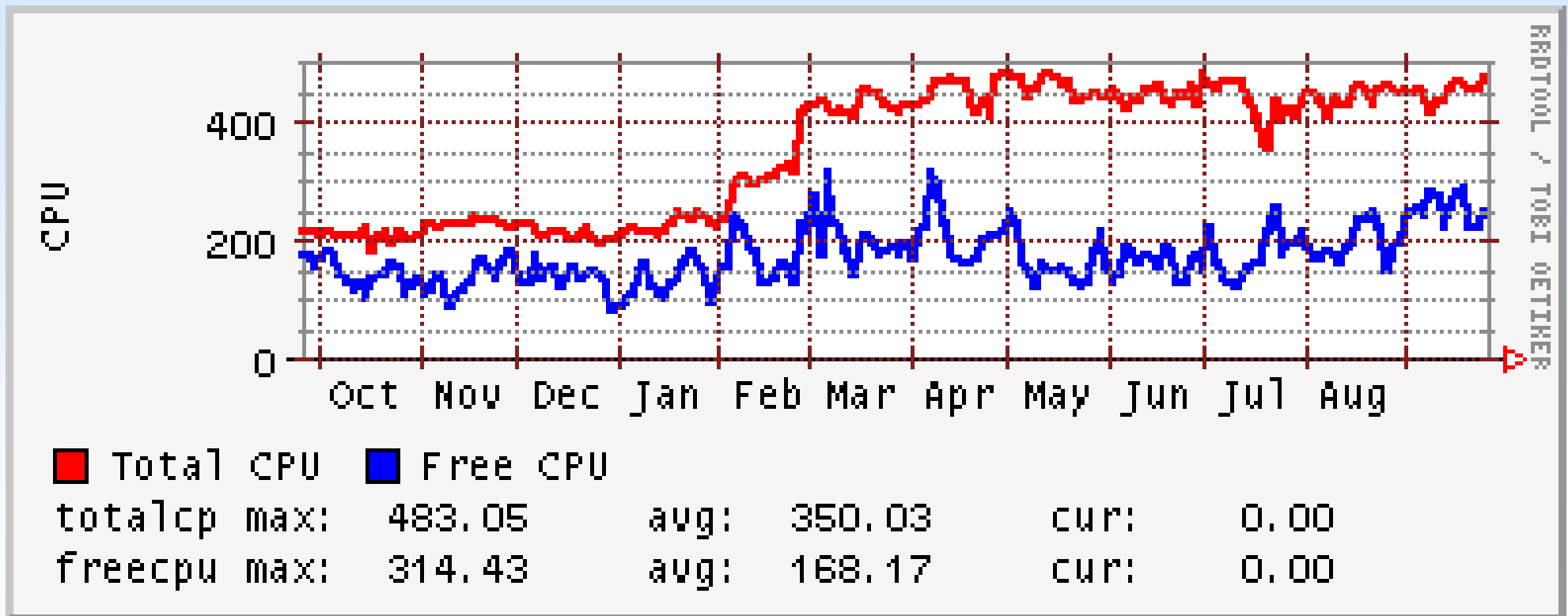
SEE-GRID
South Eastern European GRid-enabled
Infrastructure Development

- Upgrade the capacity of the regional pilot infrastructure
 - increase number of sites and resources in the pilot regional infrastructure
 - increase the number of sites migrating into EGEE
- Guarantee stability and interoperability of the infrastructure
 - operational procedures, timely updates to M/W and OS, and advance notices of updates and downtimes
 - available network resources and bandwidth-on-demand requirements
 - monitor infrastructure performance and assess its usage
- Support the accreditation of national Grid CAs.
 - Per country: One CA / Multiple RAs
- Deploy portal technology for accessing the grid and supporting application development and deployment
 - re-engineering P-GRADE Portal to the requirements of the new middleware
- Draw upon deployment experience/results of other grid projects (EGEE/EGEE-II, EUMEDGRID, BalticGrid, EELA, etc)
 - MoUs and cooperation with partner project
 - Share key deliverables and results

SEE-GRID/SEE-GRID-2 Infrastructure in Numbers



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Infrastructure Development



SEE-GRID Operational/Monitoring Tools



SEE-GRID

South Eastern European GGrid-enabled

seegrid GStat: 11:48:21 09/26/06 GMT

home alert table service regional service metrics links prod ops test balis ecla guide

AL-01-INDMA	AL-02-FIE	BA-01-ETP
RG01-IPP	RG02-SUGnd	AEGIS01-PHY-SCL
AEGIS05-ETFBG	HG-01-GRNET	HR-01-RBI
RO-07-NIPNE	RO-01-ICI	RO-03-UTCN
TR-01-ULAKBIM	TR-02-BILKENT	TR-03-MEN
MBEN-01-CIS		

sites countries total CPU free CPU run Job wait Job se Avail TB se Used TB se

Total	31	11	493	223	229	9497	8.93	2.50
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Global Grid Tests

GSTAT	OK	INFO	NOTE	WARN	ERROR	CRIT	MAINT
SFT	OK	Non-Crit	Job Sub	Job List	Match	Sched	Down

SG GLITE-3 0 2 Guide

This guide is based on the experiences gained by...
All files used in this guide can be found on <http://...>
Real configuration files for AEGIS01-PHY-SCL...
SEE-GRID adjusted yaim files can be found on <http://...>
The official upgrade and installation guide can be...
Very useful set of notes and experiences, comp...
All SEE-GRID sites involved in the first wave of u...
deployment of gLite MMV.
Suggested upgrade path for now is to install and...
volunteer sites, we will plan upgrade of product...
site administrators when this is decided.

0) SCL scripts for easier administration

A small set of scripts developed at AEGIS01-PH...
a) providing public/private key based ssh authent...
b) scp of file from one node to all other nodes (or...
c) execution of the issued command on all node...
can be found on <http://glite.phy.bg.ac.yu/GUTE/>
Read README file for more details.

1) Backup

HGSM (Hierarchical Grid Site Management)

Site Info | Contacts | Site Nodes | Downtimes | Go to Edit Mode

General Info and Contacts:

Last Modified Time: 2006-08-07 12:53:44
Site ID: BG01-IPP
Institution Name: BG01-IPP
HomePage: <http://gnd.bas.bg/>
GIIS URL: <ldap://ce001.grid.bas.bg:2170/mds-vo-name=BG01-IPP.o=Grid>
Monitoring: Yes
Status: certified
Type: egee_production
Hours Available: 08:00-17:00
Timezone: 1

Resources:

Operating System: SL 3 05
MiddleWare Software: LCG 2.7.0
Batch System: PBS Torque v 1.0.5, maui
VO-s Supported: dteam, atlas, alice, lhcb, cms, esr, seegrid, biomed_ops
Installed Applications:
Number of Worker nodes: 21
Storage Type: SATA
Storage Size (GB): 120
LAN Connection (Mbps): 100
WAN Connection (Mbps): 25

Comments:

Coordinates:

Google Map Latitude: 23.3098
Google Map Longitude: 42.6899
RTM X Coordinate: 297
RTM Y Coordinate: 282

Important: This site works best with Firefox

/C=ORG/D=SEE-GRID/O=People/O=UOB/CN=Anhan Balaz

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Key results: infrastructure, deployment, development



SEE-GRID
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- Pilot infrastructure deployed: ~520 CPUs, 8.5 TB
 - 31 sites: 3 in BG, 6 in RO, 1 in GR, 1 in HU, 2 in AL, 3 in BA, 5 in RS, 1 in HR, 2 in FYROM, 6 in TR, 1 in ME
- Set of core services deployed in the region, as well as the SEEGRID VO; in addition, VO deployment development:
 - OPS and APPLICATION roles approach; prioritization
 - VO migration for new applications, including data
 - National VOs support
- M/W deployment: mostly EGEE pace, but also
 - M/W assessment and testing done within the project for key services deployed – application driven
 - Development (e.g. voms-proxies renewal on lcg-RB)

Key results: operations, support, monitoring, applications



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Infrastructure Development

- Operational, user support, monitoring and other runtime management aspects carried out in close correlation with EGEE procedures and the EGEE-SEE ROC
 - Integration with SEE-RID GOCDB: HGSM
 - Helpdesk interoperable with EGEE-SEE
- 2 pilot applications and P-GRADE portal stable and deployed over the infrastructure
- New applications identified, major development in progress
- Important wider development contributions, e.g. LFC Java API

Key results: CA deployment and support



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- SEE-GRID catch-all CA supporting all regional users
 - Network of RAs in all participating institutions
- National CAs establishment and support throughout the SEE-GRID/SEE-GRID-2
 - RA/CA training
 - Support during the establishment of new CAs and network of national RAs
 - Croatian and Turkey CA already accredited; Serbian CA to be accredited soon; others in progress
 - Operational support to established CAs and their RAs
 - Model for other regions

Key results: migration to EGEE



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- SEE-GRID partner sites from Serbia, Croatia, and Turkey have been accepted in the production-level EGEE infrastructure and have joined the EGEE-II proposal after having proven their conformance to the joining criteria.

